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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/824,803	04/04/2001	Fumiya Terakado	010490	1042
23850	7590	10/10/2003	EXAMINER	
ARMSTRONG, KRATZ, QUINTOS, HANSON & BROOKS, LLP 1725 K STREET, NW SUITE 1000 WASHINGTON, DC 20006			MUSSER, BARBARA J	
		ART UNIT	PAPER NUMBER	
		1733		

DATE MAILED: 10/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Advisory Action</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	09/824,803	TERAKADO ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	Barbara J. Musser	1733

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 10 September 2003 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

**PERIOD FOR REPLY [check either a) or b])**

a)  The period for reply expires 3 months from the mailing date of the final rejection.  
 b)  The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.  
 ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1.  A Notice of Appeal was filed on \_\_\_\_\_. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.

2.  The proposed amendment(s) will not be entered because:

- they raise new issues that would require further consideration and/or search (see NOTE below);
- they raise the issue of new matter (see Note below);
- they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
- they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: See Continuation Sheet.

3.  Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
 4.  Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
 5.  The a) affidavit, b) exhibit, or c) request for reconsideration has been considered but does NOT place the application in condition for allowance because: see attachment.  
 6.  The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.  
 7.  For purposes of Appeal, the proposed amendment(s) a) will not be entered or b) will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: \_\_\_\_\_.  
 Claim(s) objected to: \_\_\_\_\_.  
 Claim(s) rejected: i-7.  
 Claim(s) withdrawn from consideration: \_\_\_\_\_.  
 8.  The proposed drawing correction filed on \_\_\_\_\_ is a) approved or b) disapproved by the Examiner.  
 9.  Note the attached Information Disclosure Statement(s) ( PTO-1449) Paper No(s). \_\_\_\_\_.  
 10.  Other: \_\_\_\_\_

*[Signature]*  
 JEFF H. AFTERCUT  
 PRIMARY EXAMINER  
 GROUP 1300

Continuation of 2. NOTE: The specific materials of the thermosetting resin claimed would require further search and/or consideration...

**ATTACHMENT**

Regarding applicant's argument that Kawaguchi et al. is directed to thermoplastic release sheets, the reference discloses thermosetting release sheets.

Regarding applicant's argument that the release layer of applicant is formed by applying the curable material to the thermoplastic sheet and to a metal embossing roll having an optical pattern, the claims do not disclose such. Further, this would suggest the pattern is formed on both sides of the thermosetting release sheet, which applicant does not disclose. It would appear applicant intended to argue that the thermosetting release sheet can be formed by either a thermoplastic release sheet or a metal embossing roll. However, claim 4, which discloses this limitation, is in the alternative, and thus if the examiner found either of them, the claim limitation was met.

Regarding applicant's argument that Kawaguchi et al. does not disclose the operating conditions required by the claim, it would have been obvious to use a thermosetting resin which has a change in surface gloss of less than 30% when pressed with a hot plate at 160C for 3 seconds at 20 kg/cm<sup>2</sup> since the release sheet is intended to transfer the pattern while being pressed between two rolls and while simultaneously contacting a hot thermoplastic resin. One in the art would appreciate that the curable resin chosen would be capable of not losing definition(surface gloss) while heated to a temperature near that of the extruded resin and while pressed with a force approximating that caused by the rollers forming the nip. As the release sheet is originally wound on a pay-out roller(7), one in the art would appreciate that the thickness and composition of the sheet would be chosen such that the sheet did not

fracture when wrapped around the roll. These pay-out rollers span a variety of sizes, and it would have been obvious to one skilled in the art to use a composition and thickness that would not fracture when used with a pay-out roll. Additionally, Kawaguchi et al. discloses a release sheet only 230 microns thick. This is extremely thin (Col. 6, II. 38) and one in the art would understand that such a thin sheet would be very flexible, easily able to be made into a cylinder having a diameter of 12 inches or less.

Regarding applicant's statement that Gray III et al. is not directed to forming a thermoplastic film fusing a thermosetting release sheet, the reference is not the primary reference. It used to show that the use of composite release sheets which are used to form three-dimensional patterns and why they are desirable is known.

Regarding applicant's argument that the substrate of Gray, III et al. in the composite release sheet is paper and that paper would not be able to hold a precise pattern, the paper is not the side of the release sheet that is pressed against the thermoplastic. The curable resin is the portion of the composite release sheet applied to the pattern-making surface. Since the material is flowable when applied, it would assume the precise pattern it is applied to. The porosity of the paper would have no effect on the flowability of the resin which is what determines how precisely the pattern is replicated.

Regarding applicant's argument that Kanki et al. is not directed to forming a thermoplastic film fusing a thermosetting release sheet, the reference is not the primary reference. The reference is used to show that substrates other than paper can be used in composite release sheets.

Regarding applicant's argument that the convex/concave prism is the most typical three-dimensional pattern, the claim is not restricted to it, and thus the claim is broader than the declaration.

A declaration showing expected results is not sufficient to overcome a rejection. One in the art would be expected to look for the properties required for the reasons disclosed above. That Kawaguchi et al. does not specifically discloses applicant's claimed properties does not mean that one in the art reading the reference would not realize that such properties would be needed in the release sheet.

Regarding applicant's argument that the claimed diameter is not the diameter of a pay-out roll, it is clearly chosen so that the release sheet will not crack or break when used in the equipment. One in the art would appreciate that the materials of the release sheet would need to be chosen so that they could be used in the equipment without being destroyed. Whether cracks are formed in a sheet is dependent on the size of the rollers the sheet is wound over which is equipment dependent. Additionally, the claim does not require that fine cracks are not formed in the film, but rather that it can be wound in a cylinder 12 inches or less in diameter which only requires that the film not break when formed into a cylinder 12 inches in diameter. Finally, the reference shows an extremely thin film, only 230 microns in thickness. This thickness film would be very flexible and easily capable of forming a cylinder 12 inches in diameter. Therefore the reference does disclose using a film capable of forming a cylinder 12 inches in diameter. It is noted that applicant indicates the choice of less than 30% for change in surface gloss was chosen since it is capable of being determined by a person without

use of microscopes etc. Since this change is so clear it can be seen with the naked eye, it would have been obvious to one in the art when a film's surface gloss changes to such an extent that it is visible to the naked eye that such films would not be suitable and therefore one in the art would effectively choose a film with a change in surface gloss of less than 30%.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Barbara J. Musser** whose telephone number is (703)-305-1352. The examiner can normally be reached on Monday-Thursday; alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 703-308-3853. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

  
BJM